Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Kootenai Development Corp

107 Deermont Rd SE Calgary, AB T2J5T6

Canada

2. Type of action: Permit to Appropriate Water 76D 30050684

3. *Water source name:* Ground water

4. Location affected by project: SWNW of Section 28, Township 35N, Range 26W, Flathead County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The Applicant proposes to divert water from groundwater, by means of two wells, 622 and 860 feet in depth, from January 1 through December 31 at a rate of 15 GPM up to 13.6 AF, from two points in the NWSWNW and SWSWNW of Section 28, Township 35 north, Range 26 west, for multiple domestic use (44 households) from January 1 through December 31. Garden and landscape irrigation is not associated with this application. The place of use (POU) is generally located W2NW of Section 28, Township 35 north, Range 26 west, Lincoln County, MT.

6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: The source is groundwater, therefore this is not applicable.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: The source is groundwater, therefore this is not applicable.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

The Applicant proposes to divert water from ground water, by means of two wells, 622 and 820 feet in depth, from January 1 through December 31 at a rate of 15.5 GPM up to 13.6 AF/year. The applicant determined a zone of influence by identifying likely boundaries, including a fault line to the east, lakes on the north and south, and a watershed divide to the west. This resulted in an irregularly shaped ZOI, however, the width utilized in the Applicant's assessment of physical availability was 27,019 feet. The annual volume of water passing through the potential zone of influence was calculated as 163 AF. The proposed diverted amount of 13.6 AF combined with existing appropriations totals 141.8 AF per year.

Over time, the use of this public water supply will likely reduce base flow to the Tobacco River, however, due to this source's over-appropriated status, the Applicant is required to mitigate the net depletion.

Determination: Water is available from groundwater in the amount requested. Depletions to the Tobacco River are required to be mitigated, therefore, proposed use should not impact flows to adjacent surface waters.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

The Applicant is requesting a groundwater appropriation using two wells. Each well was drilled by a licensed well driller (license # WWC-426 and WWC-625) in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21. Well number PWS-1 (GWIC ID 239914) was completed in 2007 to a depth of 622 feet below ground surface, has a minimum casing diameter of 6.6 inches, and has a static water level of 316.45 ft. Well number PWS-3 (GWIC ID 249472) was completed in 2009 to a depth of 860 ft below ground surface, has a minimum

casing diameter of four inches, has a static water level of 219.6 ft, and contains perforations from 800-860 ft.

The water system consists of two public water supply wells each capable of pumping at 15.5 GPM on an alternating basis. Each well contains a 5 HP Franklin FPS 4400 series pump controlled by variable speed drives that are programmed not to pump in excess of 15.5 GPM. Water will be routed by a 2 inch PVC pipe into a storage facility with a capacity of 50,000 gallons. The storage facility is designed to include two 1.5 inch totalizer flow meters, five 10,500 gallon high density polyethylene tanks, double backflow preventer, and two AMTROL WX-456-C hydropneumatic storage tanks. Water is distributed from the storage facility to the 44 residences by two 2 HP Franklin Electric V6 booster pumps capable of pumping approximately 50 GPM into both eight and four-inch mainlines. The public water plans system plans and specifications have been reviewed and approved by the Montana Department of Environmental Quality.

Determination: No impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

The Montana Natural Heritage Program website was referenced to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern" in vicinity of Township 35N and Range 26W, that could be impacted by the proposed project. The US Fish and Wildlife Service identified the threatened Bull Trout (*Salvelinus confluentus*). In addition the State of Montana, US Forest Service, and Bureau of Land Management identified the following species of special concern: Townsend's Big-eared Bat (*Corynorhinus townsendii*); Wolverine (*Gulo gulo*); Hoary Bat (*Lasiurus cinereus*); Fisher (*Martes pennanti*); Western Toad (*Bufo boreas*); Torrent Sculpin (*Cottus rhotheus*); and Westslope Cutthroat Trout (*Onchorhynchus clarkia lewisi*).

Determination: This proposed project is associated with the use of groundwater and therefore should not impact the above listed species.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: The national wetlands inventory program does not include wetlands data for this area. Based on USGS topographic maps and aerial photographs, no wetlands exist within the proposed project site.

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No degradation of soils is expected.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: There will be no change in land-use characteristics associated with this application so there will be no significant impact.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impact.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: Not applicable; project not located on State or Federal Lands.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: None

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: The project is consistent with planned land use.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: There should be no significant impacts on recreational or wilderness activities from this proposed use.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No impact.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes No_X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? No
- (b) Local and state tax base and tax revenues? No
- (c) Existing land uses? No
- (d) Quantity and distribution of employment? No
- (e) Distribution and density of population and housing? No
- (f) <u>Demands for government services</u>? No
- (g) Industrial and commercial activity? No
- (h) Utilities? No
- (i) Transportation? No
- (j) <u>Safety</u>? No
- (k) Other appropriate social and economic circumstances? No
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: None

Cumulative Impacts: None

- 3. Describe any mitigation/stipulation measures: None
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

The "no action" alternative to this proposed project will result in the landowner not having access to water for domestic purposes.

PART III. Conclusion

- 1. Preferred Alternative: As proposed
- 2 Comments and Responses: None
- 3. Finding:

Yes____ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: No significant impacts have been identified; therefore, no EIS is necessary.

Name of person(s) responsible for preparation of EA:

Name: Tim Eichner

Title: Hydrologist/Water Resources Specialist

Date: February 2, 2011